PATENT APPLICATION

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE
BEFORE THE BOARD OF PATENT APPEALS AND INTERFERENCES

In re application of	Docket No: Q57599
Sang-seo LEE	
Appln. No.: 09/503,506	Group Art Unit: 2142
Confirmation No.: 6707	Examiner: Douglas Blair
Filed: February 14, 2000	

For: DATA TRANSMISSION PROTOCOL USING SHORT MESSAGE SERVICE

SUBMISSION OF APPEAL BRIEF

MAIL STOP APPEAL BRIEF - PATENTS
Commissioner for Patents
P.O. Box 1450
Alexandria, VA 22313-1450
Sir:

Submitted herewith please find an Appeal Brief. A check for the statutory fee of $500.00

is attached. The USPTO is directed and authorized to charge all required fees, except for the

Issue Fee and the Publication Fee, to Deposit Account No. 19-4880. Please also credit any

overpayments to said Deposit Account. A duplicate copy of this paper is attached.

Respectfully submitted,

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WASHINGTON OFFICE
23373
CUSTOMER NUMBER

Date: February 7, 2005

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APPEAL BRIEF UNDER 37 C.F.R. § 41.37

MAIL STOP APPEAL BRIEF - PATENTS
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Alexandria, VA 22313-1450

Sir:

In accordance with the provisions of 37 C.F.R. § 41.37, Appellant submits the following:

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I.   REAL PARTY IN INTEREST

The real party in interest is SAMSUNG ELECTRONICS CO., LTD., by virtue of an

assignment executed by Sang-seo LEE, (Appellant hereafter) on March 3, 2000 and recorded by

the Assignment Branch of the U. S. Patent and Trademark Office on September 1, 2000 (at Reel

011098, Frame 0330).

II.   RELATED APPEALS AND INTERFERENCES

To the knowledge and belief of Appellant, the Assignee, and the undersigned, there are

no other appeals or interferences before the Board of Appeals and Interferences that will directly

affect or be affected by the Board's decision in the instant Appeal.

III.   STATUS OF CLAIMS

Claims 1-29 are pending in the application.

Claims 9-15 and 24-29 have been withdrawn from consideration.

Claims 1-8 and 16-23 are rejected.

The rejections of claims 1-8 and 16-23 are being appealed.

IV.   STATUS OF AMENDMENTS

All Amendments are believed to have been previously entered and made of record.

V.   SUMMARY OF THE CLAIMED SUBJECT MATTER

Independent claim 1 of the present application recites a data sending protocol using a short message service, the data transmission protocol comprising the steps of: (a) inserting a data connection service identifier into a user data field (p. 7, line 22 - p. 8, line 3 and lines 6-8); (b) segmenting input message data into a plurality of short message data fields and inserting a segmented message data field, a field indicating the number of segmented short messages and a field indicating a current short message number, into the user data field (p. 8, lines 3-8); (c) generating a short message field using the user data field (p. 8, lines 8-9); and (d) transmitting the short message field (p. 8, lines 9-10).

Independent claim 16 of the present application recites a data sending apparatus using a short message service (FIG. 4; p. 7, lines 18-21), the apparatus comprising: data connection service identifier inserting means 402 for inserting a data connection service identifier into a user data field (p. 7, line 22 - p. 8, line 1); short message processing means 406 for segmenting input message data into a plurality of short message data fields and inserting a segmented message data field, a field indicating the number of segmented short messages and a field indicating a current short message number, into the user data field (p. 8, lines 3-8); short message field generating means 440 for generating a short message field using the user data field (p. 8, lines 8-9); and transmitting means 460 for transmitting the short message field (p. 8, lines 9-10).

VI.   GROUNDS OF REJECTION TO BE REVIEWED ON APPEAL

Claims 1-7 and 16-22 are rejected under 35 U.S.C. § 103(a) as being unpatentable over

Isomursu et al. (US 6,400,958) in view of Liao (US 6,185,208).

Claims 8 and 23 are rejected under 35 U.S.C. § 103(a) as being unpatentable over

Isomursu et al. and Liao in view of Ayabe et al. (US 6,141,550).

VII. ARGUMENT

Appellant respectfully submits that the claims would not have been obvious over the applied references.

Argument 1: Isomursu et al. and Liao do not teach or suggest segmenting input message data into a plurality of short message data fields and inserting a segmented message data field, a field indicating the number of segmented short messages and a field indicating a current short message number into the user data field.

Claim 1 recites segmenting input message data into a plurality of short message data fields and inserting a segmented message data field, a field indicating the number of segmented short messages and a field indicating a current short message number into the user data field. The Examiner concedes that Isomursu et al. does not disclose a field indicating the number of short messages (p. 3, lines 5-6 of the Office Action dated February 6, 2004), but asserts that Liao discloses this feature of claim 1.

In the Response filed May 6, 2004, Appellant argued that Liao does not teach inserting a field indicating the number of segmented short messages into the user data field. In the "Response to Arguments" of the Office Action dated August 4, 2004, the Examiner responded to this argument by asserting that col. 6, lines 57-61 of Liao indicates the last short message and therefore the total number of messages.[1] Appellant respectfully disagrees. The cited excerpt discloses that when the last fragment is received, a flag in the last segment is turned on to indicate the end of the message. However, the turning on of a flag does not correspond to inserting a field. Furthermore, indicating the end of a message does not correspond to indicating

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[1] Page 5, lines 15-17.

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the number of segmented short messages into the user data field. Therefore, claim 1 is allowable

over the prior art.

Claims 2-7 are allowable over the prior art, at least because of their dependence from

claim 1.

Argument 2: Isomursu et al. and Liao do not teach or suggest inserting a reference number field, which indicates a number for referring to a type of data connection service employed, into a position next to the data connection service identifier in the user data field.

In the Response filed May 6, 2004, Appellant argued that Isomursu et al. fails to teach or

suggest the feature of claim 5 of inserting a reference number field, which indicates a number for

referring to a type of data connection service employed, into a position next to the data

connection service identifier in the user data field. Instead, Isomursu et al. only discloses

inserting an application identifier into the INFO field. Moreover, the INFO field does not

correspond to the user data field recited in the claim. Rather, the INFO field is an information

field of the short message transmission frame containing the actual short message in characters.

See col. 6, lines 34-38 of Isomursu et al.

The Examiner does not rebut this argument. Rather, the Examiner responds in the

"Response to Arguments" of the Office Action dated August 4, 2004 by asserting that the

reference number field is a non-functional limitation, because the Appellant's specification does

not provide details as to how or even if the reference number field is processed at the receiving

end. Further, the Examiner asserts that Isomursu et al. teaches a data connection service

identifier as cited above, i.e., the application identifier.[2] In response to the Examiner's

assertions, Appellant provides the following comments.

First, the present specification describes the inserting of the reference number field on p.

7, line 22 – p. 8, line 10. The reference number field is illustrated in FIG. 6 of the present

application. All of the features of claim 5 are entitled to patentable weight, as recited in the

claim. The recitation in claim 5 of inserting a reference number field, which indicates a number

for referring to a type of data connection service employed, into a position next to the data

connection service identifier in the user data field is one of the steps of the claimed data sending

protocol. The claim does not need to recite how the reference number field is processed at the

receiving end. Such processing is not part of the claimed invention.

Second, claim 5 does not simply recite a data connection service identifier. Thus,

whether Isomursu et al. discloses a data connection service identifier does not resolve the issue

of whether Isomursu et al. discloses the features of claim 5. In other words, providing a data

connection service identifier in Isomursu et al. does not correspond to inserting a reference

number field, as claimed in claim 5. Thus, claim 5 is allowable for the reasons described in the

May 6 Response.

Claim 20 is allowable over the prior art for reasons analogous to those for claim 5.

With regard to the rejection of claim 8 over Isomursu et al. and Liao in view of Ayabe et

al., Appellant submits that claim 8 is allowable over the prior art, at least because of its

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[2] Page 5, lines 18-20.

dependence from claim 1, and because Ayabe et al. does not make up for the deficiencies of

Isomursu et al. and Liao.

Furthermore, claims 16-23 are allowable over the prior art for reasons analogous to those

presented above for claims 1-8.

Appellant respectfully requests the members of the Board to reverse the rejection of all

appealed claims and to find each of the claims allowable as defining subject matter which is

patentable over the applied references.

Unless a check is submitted herewith for the fee required under 37 C.F.R. §41.37(a) and

1.17(c), please charge said fee to Deposit Account No. 19-4880.

The USPTO is directed and authorized to charge all required fees, except for the Issue

Fee and the Publication Fee, to Deposit Account No. 19-4880. Please also credit any

overpayments to said Deposit Account.

Respectfully submitted,

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CLAIMS APPENDIX

CLAIMS 1-8 and 16-23 ON APPEAL:

1. A data sending protocol using a short message service, the data transmission protocol comprising the steps of:

(a) inserting a data connection service identifier into a user data field;

(b) segmenting input message data into a plurality of short message data fields and inserting a segmented message data field, a field indicating the number of segmented short messages and a field indicating a current short message number, into the user data field;

(c) generating a short message field using the user data field; and

(d) transmitting the short message field.

2. The data sending protocol of claim 1, wherein the step (a) uses a code, which is not used in an ASCII code table, for the data connection service identifier.

3. The data sending protocol of claim 1, wherein the step (a) uses a code, which is not used in a KS5601 standard, for the data connection service identifier.

4. The data sending protocol of claim 2 or 3, wherein the code is 98H or 99H.

5. The data sending protocol of claim 1, further comprising a step of (e) inserting a reference number field, which indicates a number for referring to the type of data connection service, into a position next to the data connection service identifier in the user data field.

6. The data sending protocol of claim 1, further comprising a step of (f) translating a delivery message and extracting an identifier requesting retransmission of data.

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7. The data sending protocol of claim 6, wherein the step (f) comprises a step of (f-1) extracting a field indicating the total number of short message and a field indicating a retransmission request short message number.

8. The data sending protocol of claim 7, wherein the step (f) further comprises the steps of:

(f-2) inserting, among the whole segmented short messages, a short message data field corresponding to the retransmission request short message number, into a user data field; and

(f-3) generating a short message field using the user data field and retransmitting the short message field.

16. A data sending apparatus using a short message service, the apparatus comprising:

data connection service identifier inserting means for inserting a data connection service identifier into a user data field;

short message processing means for segmenting input message data into a plurality of short message data fields and inserting a segmented message data field, a field indicating the number of segmented short messages and a field indicating a current short message number, into the user data field;

short message field generating means for generating a short message field using the user data field; and

transmitting means for transmitting the short message field.

17. The data sending apparatus of claim 16, wherein the data connection service identifier inserting means uses a code, which is not used in an ASCII code table, for the data connection service identifier.

18. The data sending apparatus of claim 16, wherein the data connection service identifier inserting means uses a code, which is not used in a KS5601 standard, for the data connection service identifier.

19. The data sending apparatus of claim 17 or 18, wherein the code is 98H or 99H.

20. The data sending apparatus of claim 16, further comprising reference number field inserting means for inserting a reference number field, which indicates a number for referring to the type of data connection service, into a position next to the data connection service identifier in the user data field.

21. The data sending apparatus of claim 16, further comprising short message field translating means for translating a delivery message and extracting an identifier requesting retransmission of data.

22. The data sending apparatus of claim 21, wherein the short message field translating means comprises means for extracting a field indicating the total number of short message and a field indicating a retransmission request short message number.

23. The data sending apparatus of claim 21, wherein the short message processing means receives a field indicating the total of segmented short messages and a field indicating a retransmission request short message number from the short message field translating means, and inserting a data field corresponding to the retransmission request short message number into

a user data field; and the short message field generating means generates a retransmission short

message field using the user data field.

EVIDENCE APPENDIX

There has been no evidence submitted pursuant to 37 C.F.R. §§ 1.130, 1.131, or 1.132 or any other evidence entered by the Examiner and relied upon by Appellant in the appeal.

RELATED PROCEEDINGS APPENDIX

There are no related proceedings.